

- 1 1. A signal-repeating device control arrangement for use in a facility having different
2 types of user-controllable devices that are co-located with respective user-interface units in
3 various zones of the facility and that provide user-selectable information to the user, the
4 respective user-interface units providing input selectors for controlling operation of the
5 user-controllable devices, the signal-repeating device control arrangement comprising:
6 a user-interface control device having a user interface for receiving inputs from a
7 user and having a transceiver for sending data wirelessly in response to the user inputs and
8 for receiving data;
9 for use in communicating with the zone-located user-controllable devices, a signal-
10 repeating base-station including
11 a base-station transceiver adapted to communicate data with the user-
12 interface control device, and
13 a data-routing circuit adapted respond to the user inputs received via the
14 base-station transceiver by sending designated groups of digital data sets to
15 manipulate operation of at least one of the different types of user-controllable
16 devices.
- 1 2. The signal-repeating device control arrangement of claim 1, wherein the user-
2 interface control device further having a display for communicating user data in response
3 to data received from the signal-repeating base-station.
- 1 3. The signal-repeating device control arrangement of claim 2, wherein the display of
2 the user-interface control device is a touch-panel display.
- 1 4. The signal-repeating device control arrangement of claim 1, wherein the display of
2 the user-interface control device is a touch-panel display.

1 5. The signal-repeating device control arrangement of claim 1, wherein the transceiver
2 of the user-interface control device is further adapted to communicate bi-directionally and
3 wirelessly with the base-station transceiver.

1 6. The signal-repeating device control arrangement of claim 1, wherein the data-
2 routing circuit includes a data processor that is programmable for controlling operation of
3 the signal-repeating base-station and further includes a data-input circuit for downloading
4 certain programming data.

1 7. The signal-repeating device control arrangement of claim 6, wherein the certain
2 programming data is configuration data.

1 8. The signal-repeating device control arrangement of claim 6, wherein the certain
2 programming data is program-execution code for execution by the data processor.

1 9. The signal-repeating device control arrangement of claim 1, wherein the data-
2 routing circuit includes a programmable data processor that is adapted and programmed to
3 emulate communication with the user-controllable devices, the communication being
4 otherwise provided by at least one of the zone-located user-interface units.

1 10. The signal-repeating device control arrangement of claim 9, wherein the data-
2 routing circuit communicates with at least one of the user-controllable devices via infrared
3 signaling.

1 11. The signal-repeating device control arrangement of claim 1, wherein the data-
2 routing circuit communicates with at least one of the user-controllable devices via infrared
3 signaling.

1 12. The signal-repeating device control arrangement of claim 1, wherein the data-
2 routing circuit includes a programmable data processor that is adapted and programmed to
3 emulate communication with the user-controllable devices, the communication being
4 otherwise provided by at least one of the zone-located user-interface units, and further
5 including a data-routing switch that is adapted to communicatively and selectively couple
6 data between selected ones of the different types of user-controllable devices and the
7 programmable data processor.

1 13. The signal-repeating device control arrangement of claim 12, wherein the data is
2 communicatively coupled between the data-routing switch and the programmable data
3 processor via infrared circuits located and arranged with the data-routing switch and the
4 signal-repeating base-station, respectively.

1 14. A signal-repeating device control arrangement for use in a facility having different
2 types of user-controllable devices that are co-located with respective user-interface units in
3 various zones of the facility and that provide user-selectable information to the user, the
4 respective user-interface units providing input selectors for controlling operation of the
5 user-controllable devices, the signal-repeating device control arrangement comprising:

6 a user-interface control device having a user interface for receiving inputs from a
7 user, having a transceiver for sending data wirelessly in response to the user inputs and for
8 receiving data, and having a programmable configuration for providing user control over
9 the different types of user-controllable devices;

10 for use in communicating with the zone-located user-controllable devices, a signal-
11 repeating base-station including

12 a base-station transceiver adapted to communicate data with the user-
13 interface control device,

14 a data-routing circuit adapted respond to the user inputs received via the
15 base-station transceiver by sending designated groups of digital data sets to
16 manipulate operation of at least one of the different types of user-controllable
17 devices, and

18 a data port adapted to download information for configuring both the signal-
19 repeating base-station and, via the base-station transceiver, for configuring the user-
20 interface control device.